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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,933	07/17/2003	Neldon P. Johnson		3052
7590 09/03/2004			EXAMINER	
J. David Nelson			YEUNG, JAMES C	
NELSON, SNUFFER, DAHLE & POULSEN, P.C. 10885 South State Street			ART UNIT	PAPER NUMBER
Sandy, UT 84070			3749	

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/621,933	JOHNSON, NELDON P.			
Office Action Summary	Examiner	Art Unit			
	James C Yeung	3749			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet v	vith the correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a y within the statutory minimum of th will apply and will expire SIX (6) MC , cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communication. NBANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 17 J	uly 2003.				
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-38 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 1-38 is/are allowed.  6) Claim(s) is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examine	er.				
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex					
Priority under 35 U.S.C. § 119					
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority document 2. ☐ Certified copies of the priority document 3. ☐ Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. Is have been received in rity documents have been (PCT Rule 17.2(a)).	Application No n received in this National Stage			
Attachment(s)	_				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) o(s)/Mail Date			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 0717/03.	5) Notice of	Informal Patent Application (PTO-152)			

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**DETAILED ACTION** 

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Specification

1. The lengthy specification has not been checked to the extent necessary to determine the

presence of all possible minor errors. Applicant's cooperation is requested in correcting any

errors of which applicant may become aware in the specification.

**Drawings** 

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they

do not include the following reference sign(s) mentioned in the description: 97, 101, and 129.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office

action to avoid abandonment of the application. Any amended replacement drawing sheet should

include all of the figures appearing on the immediate prior version of the sheet, even if only one

figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the

page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If

the changes are not accepted by the examiner, the applicant will be notified and informed of any

required corrective action in the next Office action. The objection to the drawings will not be

held in abeyance.

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Claim Rejections - 35 USC § 102

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3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 4. Claims 1-3, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Yasuda (Japan Pat. 56-23666). The structure as claimed is fully anticipated by Yasuda (note elements 1, 3 and P, Fig. 1).
- 5. Claims 1-2, 29-30, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Inagaki (Japan Pat. 54-23234). The structure as claimed is fully anticipated by Inagaki (note elements 1, 5 and 12, Fig. 4).
- 6. Claims 1-5, 10-16, 20, 28-30, 35, and 37-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Bard. The structure as claimed is fully anticipated by Bard (note elements 27, 51 and 52, Figs. 3 and 7).
- 7. Claims 1, 17-19, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Holdridge. The structure as claimed is fully anticipated by Holdridge (note elements 19 and 21, Fig. 2).

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8. Claims 1-4, 10-20, 29-30, 36, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Doundoulakis. The structure as claimed is fully anticipated by Doundoulakis (note elements 10, 11, and P, Fig. 1).

## Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 6-9, 21-27, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inagaki (Japan Pat. 54-023234) in view of either Altman or Riggs.

Altman teaches the use of an energy-retaining capsule (78, Fig. 8) for the purpose of enclosing an absorption zone so as to maximize heat transfer efficiency (col. 4, lines 52-62).

Riggs teaches the use of an energy-retaining capsule (48, Fig. 6) formed of borosilicate glass for the purpose of enclosing an absorption zone so as to maximize heat transfer efficiency (col. 5 line 67 – col. 6, line 7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide each of the absorption zone of Inagaki (at 3, Fig. 2) with an energy-retaining capsule such as taught by either Altman or Riggs in order to maximize heat transfer efficiency.

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11. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Gillery is cited to show an energy capsule formed of borosilicate glass (col. 3, line 3).

12. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to James C Yeung whose telephone number is 703 308-1047. If

attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira

Lazarus can be reached on 703 308-1935. The fax phone number for the organization where this

application or proceeding is assigned is 703-872-9306.

13. Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JΥ

September 1, 2004

lames C. Yeung